

Department of Commerce ▪ National Oceanic & Atmospheric Administration ▪ National Weather Service

NATIONAL WEATHER SERVICE ALASKA REGION SUPPLEMENT 06-2003

APPLICABLE TO NWSI 10-911

MARCH 1, 2019

Operations and Services

Hydrologic Services Program, NWSPD 10-9

River Forecast Center Operations, NWSI 10-911

ALASKA-PACIFIC RIVER FORECAST CENTER OPERATIONS

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

OPR: W/AR2 (S. Lindsey)

Certified by: W/AR2 (S. Lindsey)

Type of Issuance: Routine

SUMMARY OF REVISIONS: This supplement supersedes NWS Alaska Region Supplement (ARS) 06-2003, dated July 26, 2012, applicable to National Weather Service Instruction (NWSI) 10-911. It addresses the provision of National Water Model output for Hawaii and the role of the Alaska-Pacific River Forecast Center in support of WFO Honolulu, and clarifies the source of flash flood guidance in the Alaska Region.

SIGNED

February 15, 2019

Carven Scott

Date

Regional Director

Alaska-Pacific River Forecast Center Operations

<u>Table of Contents:</u>	<u>Page</u>
1. Introduction.....	2
2. Staff Operational Responsibilities and Specialty Areas	2
2.1 Hydrologist in Charge	2
2.2 Development and Operations Hydrologist	2
2.3 Service Coordination Hydrologist.....	2
2.4 Information Technology Specialist	
3. Hours of Operation	2
3.1 Routine Hours of Operation	3
3.2 Extended Hours of Operations	3
4. Routine Operations	3
4.1 Flash Flood Guidance Operations	3
4.2 WFO Support Operations	3
5. Non-Routine Operations	4
5.1 Partnership with Alaska’s Division of Homeland Security and Emergency Management...	4

1. Introduction. This supplement identifies unique conditions in Alaska Region that affect operations and services of the Alaska-Pacific River Forecast Center (APRFC).

2. Staff Operational Responsibilities and Specialty Areas.

2.1 Hydrologist in Charge. The Hydrologist in Charge (HIC) of the APRFC also serves as the Regional Hydrologist for Alaska Region. As such, the HIC participates in meetings and discussions with the Hydrologic Service Divisions of the other regions and NWS Headquarters, representing Alaska Region and ensuring the interests of the Pacific Region are addressed.

2.2 Development and Operations Hydrologist. The Development and Operations Hydrologist (DOH) will serve in a deputy capacity for the Regional Hydrologist as necessary for hydrologic activities within the Region.

2.3 Service Coordination Hydrologist. The Service Coordination Hydrologist (SCH) will serve in a deputy capacity for the Regional Hydrologist as necessary for hydrologic activities within the Region.

2.4 Information Technology Specialist. The Information Technology Specialist (ITS) is responsible for maintaining the system configurations of RFC hardware as well as working with the staff on development and implementation of new forecast techniques, processes, and web-based displays on RFC systems.

3. Hours of Operation.

3.1 Routine Hours of Operation. Hours of operation for the APRFC will at all times be based upon hydrologic conditions within the state. During open water season, which extends from the onset of ice breakup on area rivers in the spring to the time at which ice conditions on area rivers prevent accurate stage and discharge measurements in the winter, the APRFC will conduct routine operations from 6:00 am to 5:00 pm seven days a week. This allows APRFC forecasters to coordinate with forecasters on multiple shifts at the weather forecast offices (WFO). During the winter season, personnel will work 8- to 10-hour days that allow the APRFC to be staffed during core hours on non-holiday weekdays.

3.2 Extended Hours of Operations. When conditions warrant in any season, the APRFC hours of operation may be extended. Prior to the end of the standard APRFC work day, the lead forecasters at any of the WFOs or the regularly scheduled duty forecasters in the APRFC may ask the HIC, DOH, SCH or designated supervisor to extend the duty day. This may require extended work hours for the duty forecasters or it may be accomplished by modifying the shift schedules of the other qualified forecasters. When the APRFC is not staffed, the lead forecaster at any WFO may contact the duty forecasters, HIC, DOH, or SCH to request information or support. Contact procedures for the APRFC will be part of the WFO and APRFC local station policy.

4. Routine Operations.

4.1 Flash Flood Guidance Operations. The APRFC does not have sufficient well-calibrated model basins to prepare and distribute daily model-based flash flood guidance throughout its area

of responsibility. In those areas for which daily values are not available, the APRFC uses guidance based on NOAA ATLAS 14 precipitation recurrence intervals and site specific information developed by the local WFO. The principal cause of flash flood events in Alaska is convective rainfall in mountainous terrain, so the APRFC will provide active assistance to the Alaska WFOs in identification of rainfall events that might be expected to cause rapid flooding during hours of operations. Duty forecasters will be available to the WFO for consultation on hydrologic events when the APRFC is not staffed.

APRFC will provide hydrologic development support to the flash flood programs of all NWS offices in the Pacific Region as needed. This may include training, outreach, development of plans and procedures, and provision of flash flood forecasting tools. As part of the Advanced Hydrologic Prediction Services, the APRFC will develop prototype hydrologic modeling efforts for selected streams in Pacific Region using site-specific models or distributed hydrologic modeling. As the National Water Model (NWM) becomes operational for Hawaii, APRFC staff will support the Senior Service Hydrologist and staff at WFO Honolulu with verification, validation and training to understand the guidance available from the NWM.

4.2 WFO Support Operations. The APRFC works with the Alaska WFOs as a partner in the hydrologic program. While responsibility for the hydrologic warning program remains with the WFOs, APRFC will assist with the issuance of flood watches, warnings, and statements through the generation of a hydrologic coordination message (HCM). This message will provide RFC guidance on the expected location, duration, impacts, and severity of an event along with a recommendation for type of product to be issued and contact information for the RFC duty forecasters. All such forecasts will be coordinated with the WFO with hydrologic responsibility for the forecast area. APRFC issues selected routine forecast products that would normally be issued by the WFO based on APRFC guidance, such as hydrologic summaries (RVA) and daily river and lake summaries (RVD). A WFO product issued by the APRFC will use the standard product format and World Meteorological Organization header for that WFO, but may indicate within the product that it was issued by the APRFC. APRFC may collect and distribute hydrometeorological observations from the WFOs' areas of responsibility, most notably those which are transmitted by non-USGS automated gages or those which are entered by observers using the internet. APRFC will also provide support and assistance in the hydrologic outreach program of the WFOs.

5. Non-Routine Operations.

5.1 Partnership with Alaska's Division of Homeland Security and Emergency Management. The APRFC may provide hydrologic expertise in flooding, including the placement of a trained forecaster in Alaska's Division of Homeland Security and Emergency Management's aerial reconnaissance associated with spring breakup of ice on major rivers, when requested. This reconnaissance serves the purpose of outreach to communities at risk of flooding and delivers critical observational information not otherwise available to the forecasters at the APRFC. The APRFC will also provide hydrologic analysis, forecast, and warning support to meet public safety needs from events such as glacier-dammed lake outbursts or changes to river flow patterns associated with glacial movements.